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SCHOOL AND SOCIETY

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Volume XVIII SATURDAY, SEPTEMBER 15, 1923 Number 455

ADDRESS AT THE INAUGURATION OF THE PRESIDENT OF THE AMERICAN UNIVERSITY OF BEIRUT[1]

Mr. President, Members of the Faculty, Class of 1923, Ladies and Gentlemen:

The kind introduction that has just been given me by the presiding officer both warms my heart and touches my vanity. I consider it no small compliment to be presented as the representative of the regents of the University of the State of New York, who have granted a charter of existence to this American University, and thereby become responsible for its remarkable history and its extensive and striking service for mankind. But, while that statement of my position and of the reason for my presence here is correct and accurate, I am fearful lest it leave you still somewhat in the dark. Does it not seem strange that one university, belonging to a single state, should be privileged to give corporate existence to another university, which bears the name of all the states? It reminds us of the proverbial tail wagging the dog.

The explanation, of course, rests in the fact that the word "university" is employed in two very different senses. In the United States we have come to think of a university as a college of liberal arts surrounded by various professional schools—medicine, law and theology at first, but more recently also dentistry, engineering, commerce, agriculture, education, etc. It is a sort of college of colleges, and in this sense your institution in Beirut can qualify as one of the great American universities. But there is another sense in which "university" may be used. This second meaning goes back to those fruitful centuries of the Middle Ages when universities first came to be founded, but America seems to have borrowed it more directly from a French source in the eighteenth century. The great philosopher and encyclopedist, Diderot, outlined a plan for an organization of all grades of education in a state which he called a university, and, when the State of New York sought to organize its educational institutions, it adopted the term of Diderot and called the resulting system "the University of the State of New York."

This so-called university has for nearly a century and a half chartered and generally controlled all the schools, colleges and universities in the Empire State, and from time to time it has extended its recognition, privileges and charter to institutions of higher education in the Near East, China and South America, of equal standing, and has adopted and stood responsible for them as if they were its own. In this way has the American University of Beirut become a member of the family of the University of the State of New York. The parent organization is exceedingly proud of its child, although it has never contributed anything toward its support. This American University, which has performed so signal a service for humanity throughout the Near East, has been maintained from the first by big-hearted, philanthropic and generous individual citizens of the United States.

We are met to-day upon an auspicious, but most memorable and solemn occasion. We are here to commemorate the work of the past as well as to inaugurate that of the

[1] Address of Dr. Frank P. Graves, president of the University of the State of New York and State Commissioner of Education for New York, at the inauguration of President Bayard Dodge, on June 28, 1923.

future. The present is an event without parallel in the annals of American collegiate education. By remarkable good fortune a single family has been able to furnish the two devoted men who have presided over this institution from its inception to its present state of maturity, and we are now gathered to celebrate the installation of the third executive, who by all the ties of matrimony, temperament, education and experience is destined to prove a worthy son and grandson to those who have preceded him. That he will bring to the American University at Beirut an era of even greater prosperity and usefulness, we none of us doubt; that he may be active and happy in his labors for innumerable years to come, we all devoutly hope.

Sixty years ago Daniel Bliss, then in the full vigor of life, agitated the project of founding a Protestant College in Syria and succeeded in obtaining for it in America both charter and funds. For forty years he nursed the institution through a critical infancy and childhood, and brought it vitality and strength in the midst of determined opposition and almost insuperable obstacles. He retired from the presidency in 1903, rich in years, but lived on as a counsellor and benediction to the college he had founded until the ninety-third anniversary of his birth, when, shortly after witnessing its fiftieth commencement, he was gently wafted to the abode of the saints.

But, upon his retirement, his second son, Howard S. Bliss, felt himself called to surrender a most successful career as preacher and pastor, during which he had declined the presidency of several flourishing colleges, and to devote his life to developing and strengthening the institution so firmly established in Syria by his father. Of what he accomplished during the seventeen years before he was called home by his Heavenly Father, let these magnificent buildings and facilities and the thousands of alumni most eloquently speak. To adapt the words of the Latin poet, Howard Bliss may be described as *insigni patre filius insignior*. Having sat at his feet as a youthful parishioner, I can never forget his splendid intellectual and spiritual gifts. But while he was always an inspiration and beneficent influence for young and old, he was at the same time possessed of superb common sense and practicality. He carried the College through several critical periods, and saved its very existence in 1914 by convincing the Turkish war dictator of its philanthropic and altruistic nature.

But the strain of the next four years proved too great for human strength, and he was eventually forced to return to his native land as an invalid. Here he soon surrendered his life—a martyr to the Great War as truly as those who made the supreme sacrifice on Flanders Field or at Belleau Wood. As Dr. Philip Hitti, a graduate of the American University and a personal pupil of Doctor Bliss, declared three years ago at our Convocation in Albany: "During the four years of ravaging war, he administered relief to the needy and brought succor to the helpless, poor and fatherless. He met the Turkish and German forces and defeated them in a spiritual sense just as the soldiers of the allies met them on the battlefields of Europe and defeated them in a physical sense."

My visit upon this occasion represents a second return call. Sixty years ago Daniel Bliss visited the Board of Regents in Albany, and, with the advocacy of the great Samuel J. Tilden, succeeded in obtaining from them a charter for his college. In 1918, at the time when Howard Bliss stood most in need of American comfort and friendship, my distinguished predecessor, John H. Finley, greatly cheered him by coming to Beirut and returning the call

made by Daniel Bliss so long before. The following year Howard Bliss visited us at the Convocation of the University of the State of New York, and pleaded for the work of his beloved College. The Board of Regents were thrilled by the sight of this devoted man upon whom the grim reaper had so obviously set his mark, and shortly afterward they appropriately re-chartered your institution as the American University of Beirut, largely as their tribute to the work of Howard Bliss. And now, thanks to the hospitality of your Board of Trustees, I am to-day once more returning the call and am privileged to represent the Regents at this the sixtieth anniversary of their bestowal of the college charter and at the inaugural exercises of Bayard Dodge as president.

This is indeed a rare honor for me. It means much to bear the greetings of the most distinguished and influential educational body in the world, but it means more to be present upon a day so replete with memories of the past and significance for the future. I have followed the career of Bayard Dodge with interest and hope ever since he was graduated from Princeton some fourteen years ago. I was at Columbia University while he was taking his Master's degree there and at the same time studying at Union Seminary, and I have known him since, although, to be frank, I have never felt absolutely certain whether I was talking to him or to his twin brother, with whom I was for a time a fellow trustee of Teachers College. Like all other alumni of that institution, too, I admired and revered his aunt, the lamented Grace Hoadley Dodge, who has always been regarded as our patron saint.

President Dodge, you are bringing to this great work a most unusual equipment. You have all the vigor of youth, combined with the poise and judgment of age. You have fallen heir to a great intellectual and spiritual equipment, and this has been trained and seasoned by education and experience. And you will have need of every particle of your ability and every ounce of your energy. Profound and arduous as were the wisdom and labors of your predecessors, there will be demanded of you even greater vision and more strenuous efforts. The institution is no longer a struggling college with a hundred or two students. It is a great university and has over one thousand students in attendance and more than five thousand knocking at its doors. Its work extends over many acres, and is housed in thirty buildings. Besides the original Liberal Arts course, it is conducting at a high level professional schools of Medicine, Dentistry, Pharmacy, Nursing, Agriculture, Engineering, Commerce, Education and Biblical Archaeology and Philology. Such training will require earnest thought and planning, and it will need material support. Despite all effort to confine the work to its resources, the university has long since outrun its assured income and must each year look for new benefactions to maintain it. While the academic world believes that you have the genius, strength and training to carry this gigantic undertaking to a successful conclusion, it is held to be a task of such herculean proportions as to challenge the ability and energy of even the strongest man.

People in the Near East, I understand, are more patient and reasonable about their educational projects than are we of the Occident, but, like all great university presidents, you must be prepared to meet with unjust criticism from the thoughtless and possibly even with attacks upon your character by the ignorant and narrow. You will have to meet them with poise and patience and without any appearance of irritation or resentment, "for so persecuted they the prophets who were before you." You may expect any sort of accident or misfortune to fall upon yourself or the University without warning, and you must

be ready to deal with everything at a moment's notice. You will pass through weary days and sleepless nights, but you must unselfishly labor for the welfare of your institution, continuously and hard. You must be content to struggle on incessantly, though achievement seem slow in arriving.

On the other hand, you will have the opportunity of associating with the scholars and high-minded members of your faculty and board of trustees. The devotion, self-sacrifice and efficiency of which these are capable is amply testified to by the work of the past three years, during which Professor Nickoley has stepped into and occupied the breach caused by the translation of your predecessor. You will ever have about you the vitality and hopefulness of your students, and, until one has lost the opportunity of living with youth, he little realizes the joy and inspiration of it all. You will have the privilege of meeting the best men and women of the community at their best, for these superlatives are needed to describe those who will talk with you about their children or pupils at the university.

You will live in the atmosphere of the world's greatest minds, present and past. You will visualize a Golden Age that belongs to the future, rather than to the past, and you will play a leading part in bringing it in. No educational field is better prepared for the seed-time and harvest than that which has fallen to your lot. You will be privileged, too, not only to maintain and advance the standards, but to build up the resources of the institution, and, like some celestial magician, to transmute material wealth into the spiritual riches of character, intellectual achievement and the salvation of the Near East. You will be enabled to leave behind you a lasting monument by the impression that your work will make upon this great institution and upon the people of the Orient.

President Dodge, the task before you is stupendous, but the inspiration that it affords to one of your equipment, devotion and, above all, antecedents, is far greater. We are all most sanguine and jubilant about the outcome. And it is my privilege, as the representative of the Board of Regents, in the name of the University of the State of New York, to bid you a hearty welcome and wish you God-speed in your efforts for the upbuilding of education throughout this historic land.

FRANK PIERREPONT GRAVES

WHO SHOULD STUDY LATIN?[1]

OUT of the smoke of the controversy that has been waged around Latin in the last decade there have emerged at least two fairly definite conclusions. These, I think, are very generally accepted by cool headed, thinking people on either side.

1. Not all high-school students should study Latin.

2. The study of Latin has real and positive value for some students.

While neither of these conclusions is very new or startling, yet they mark a distinct step on the road toward a better understanding of the situation. Granting, then, that some should not study Latin, how shall we determine those who should not and how can we decide upon those who should?

These questions can be answered definitely only after careful and painstaking research has determined the following:

1. What are the values that we can reasonably expect the students of Latin to achieve? Among the many objectives stated for the study of Latin, which represent real values in life?

2. Are these or any of them values to all pupils?

3. For whom are they real values?

4. To what extent are these values pecu-

[1] Presented at the Greek and Latin conference, Schoolmen's Week, University of Pennsylvania, April 13, 1923.

liar to Latin or best attained through Latin?

5. How thoroughly must a student master Latin in order to attain these values?

Fortunately we are now engaged in a well-planned scientific investigation that bids fair to shed considerable light upon these questions. In my judgment, the classical investigation marks a new phase in the determination of educational objectives and in the evaluation of methods of achieving these objectives. Before the end of the year we shall be in a position to forecast the answers to at least some of the questions propounded. I am very sorry that we do not have these results before us now. In the absence of definite data I can only give my own individual opinions on the question before us.

My discussion is based upon the following theses:

1. Subjects in school represent values; these values are based upon needs of students. That is, a student has a certain need, a lack; subjects of study are the means of supplying these needs, hence they represent values.

2. Students in high school have certain needs that are common to all, such as health, command of English, knowledge of the machinery of government, character, etc.

3. Other needs are not common to all but may be only to certain groups of students or even individuals alone, such as stenography, carpentry, Greek.

4. Needs are relative in importance. Some are of supreme importance; others less important. Choice must be made, often, between subjects that have values merely because there is not time enough to take everything.

5. Values are dependent upon abilities. Any subject has value in meeting the needs of an individual only when the individual has the ability to attain some mastery over it.

6. Subjects that represent important values based upon needs common to all students should be required of all students.

7. Subjects that represent important values based upon needs common only to certain groups should be required of those in the group only. They should not be required of all.

We have already assumed that Latin does not represent an important need common to all students. Who, then, should study Latin? Those in immediate charge of the classical investigation have wisely said that the progressive development of the power to use Latin, which is the immediate teaching objective, is essential to the attainment of most of the indirect as well as of the direct objectives assumed for Latin. If we agree with this statement we must admit that those who can not secure a passing grade in a half year's study of Latin or a whole year, get very little value from it. It is extremely probable that for such pupils other subjects would prove more valuable.

But how can we determine in advance who can succeed in the study? It is true that no very successful diagnostic tests have yet been devised for Latin. But Dr. Thorndike affirms that the common group intelligence tests furnish a very satisfactory basis for predicting probable failure and probable success. It would be helpful, at least, to use these. There are, I understand, some who still believe that the only way or the best way in which to determine the ones who should study Latin is to require all to take it for a full year; those who succeed should take more of it; those who fail can drop it and take other subjects. If I had words that would adequately express my abhorrence of this medieval method I should be strongly tempted to use them even in this polite society; as I do not possess such a vocabulary I can only say that this is practically the same method as that used in the days of the Salem witchcraft. If any one was suspected of being a

witch throw her in the river; if she drowned she was not a witch; if she didn't drown she was.

Suppose, then, on the basis of any standardized group intelligence test we divide the ninth grade students into two groups representing the upper and the lower halves of the distribution. We do not as yet know the critical score that indicates ability to master Latin, but from the studies that have been made it would seem to be safe to assume that in a normal distribution two thirds of the lower half could not master Latin sufficiently well to warrant their taking it. They would either fail entirely or do such poor work as not to justify the time and energy spent upon it. On this basis, two thirds of all students in the ninth grade (the entire upper half and one third of the lower half) could master Latin reasonably well. Should all of these study it? If so, why? Should some not study it? Why?

These two questions probably represent the two general attitudes toward the question. Many advocates of Latin seem to feel that unless you can demonstrate clearly that a boy should not study Latin, compel him to take it. The opponents contend that unless you can demonstrate that he should take it, do not compel him to do so. The richness and variety of offerings in our high schools lends much more weight to the second position. It is the best attitude to take toward all subjects. There is no reason to believe that Latin is such a paragon of values as to make it necessary to give it such a "place in the sun" as this.

A reason widely current is stated thus: "Every one who has the ability should look forward to going to college. You can never tell who may want to go. Latin will always be accepted for admission and for some colleges it is necessary; a foreign language is usually required; therefore all should study Latin." Many of our smaller high schools have frankly constructed their programs on this principle. Some junior high-school principals have adopted it and require Latin of all. This principle is unsound for the following reasons:

1. We can not prepare people in advance to meet every possible situation in life. If, on this basis, we should require Latin, there would be even more reason for requiring all to take stenography or carpentry or automobile repairing, for there are more who will need such training than will go to college.

2. We can, in most cases, only prepare people in advance.

a. For those situations that all will most certainly meet.

b. For those situations that the major part of the students will meet.

c. For those situations that fairly large and important groups of students will meet. (This would not, of course, justify requiring the given subjects of all.)

All will certainly not go to college. How large a proportion of ninth grade students will go to college? We know that the proportion of the total enrollment in our high schools who are preparing to go to college has decreased very markedly during the last twenty years, until now less than 5 per cent. are preparing for college. Of the graduating classes about one third are prepared for college but less than half of these actually go to college. A very conservative estimate, then, would indicate that of the ninth grade students in our public high schools not more than two out of a hundred will actually go to college. Eliminating the one third at the low end of the intelligence scale, we should even then have less than seven out of a hundred of those who could successfully take Latin who would go on to college. Of these seven not more than three would need Latin in order to get into college. We could, on this ground, scarcely justify compelling sixty-three to study Latin for the sake of the three who would actually need it for college entrance.

If any compulsion were used it should rather be to compel the three to take the work that the sixty-three need.

Taking the estimate made that two out of a hundred of ninth grade students will go to college, and that not more than one will actually need Latin in order to enter college, let us compare the proportion of ninth graders who are now studying Latin in our public schools. According to the data presented by Dr. Riemer to this group last year, the percentage of ninth grade students taking Latin was as follows:

Kind of High School	Per Cent.
17 city high schools	39.8
Class I—high schools (14 counties)	51.3
Class II— " " " "	72.0
Class III— " " " "	81.0
Total all high schools	46.2

This, you see, is all out of proportion to those who need it for college entrance.

If, then, the need for college entrance fails us we are forced to fall back upon other values ascribed to Latin—those that are intrinsic, and we must compare these values with the intrinsic values of some other subject that would be taken in its place if Latin were omitted. This is, at present, largely an unworked field. The present tentative conclusions from the investigation point to a real contribution that the study of Latin makes to the increase of English vocabulary. Whether this gain will prove to be greater than that obtained from a direct study of etymology is as yet uncertain. In any case, the gain so far indicated, while real and significant, is not sufficiently large to warrant compelling all who can study Latin successfully to study it.

Time forbids me to consider each of the other objectives stated. One further observation may, however, be made. Nearly all assume that the value of Latin, as of any foreign language, is cumulative—the longer one studies it the more value he receives, or, to put it in another way, many if not all the values of Latin increase with the degree of mastery of it. On this basis we can confidently assert that those who take Latin for only one year get comparatively little value from it; those who take it for four years should get much greater value. How many of those who begin Latin continue it for two, three or four years? Again referring to the study made by Dr. Riemer we find the following somewhat startling facts: 42 per cent. of those who begin Latin take it only one year, 77 per cent. take it three years or less and only 13 per cent. continue it for the four years of the high-school course. Stated in another way, less than 6 per cent. of those enrolled in the ninth grade will study Latin for four years and only 11 per cent. will study it more than two years. Ought we not to consider very carefully whether there may not be other subjects now offered or that can be offered in our high schools that will be more valuable than one or even two years only of Latin? Will not Latin itself be very materially benefited, the quality of work in it be improved and the real values that it has for some be enhanced by a more careful selection of those who shall study it? This we now can do with considerable confidence.

Granting, then, that some should not study Latin and some should, how many and who should study it?

1. Those who need it for college entrance. This will constitute not more than 1 per cent. of the ninth grade students.

2. Those who will presumably continue it for at least three years and for whom it will have a real value above that of some other subject that might be studied in its place. About 10 per cent. of ninth grade students will take it for three years. How many of these will get values greater than would be obtained by taking some other subject? This is, at present, pure conjecture. A rough guess would place this at one half. On this basis from 3 per cent. to

7 per cent. of the ninth grade class should be expected to take Latin. Is this too small? Possibly, but possibly it may be too large. Who can tell? Of this I am certain, that whatever may be the results of the various investigations now under way, those of us who believe in Latin should be ready to accept them and to take whatever action may be justified by the facts.

ARTHUR J. JONES
UNIVERSITY OF PENNSYLVANIA

EDUCATIONAL EVENTS

THE DECREASE IN INFANT MORTALITY IN ENGLAND

IN the section of public health, at the recent meeting of the British Medical Association, Dr. James Wheatley discussed the factors contributing to the recent decrease in infant mortality. According to an abstract from the London correspondent of the *Journal* of the American Medical Association, he submitted this instructive table.

Thus there was no fall in the long period 1841–1900. But since 1900 the fall had been large and continuous. The fall in the birth rate began twenty years before the fall in the infant death rate, and during this period it amounted to 17 per cent. The general death rate had been falling for sixty years before the infant death rate began to fall. It fell in that time 19 per cent. It thus appeared that though the birth and death rates fell before 1900, the causes producing that fall (presumably in the case of the death rate better sanitation) either did not influence the infant death rate or were prevented from doing so by other factors. Dr. Wheatley held that the decrease of infant mortality was due to general increase of intelligence in parents. The beginning corresponded in time with general improvement in education. But a low mortality was quite possible with ignorance and poverty, under good conditions of sun and weather and more primitive living, particularly natural feeding. The latter part of the fall of infant mortality was probably due not only to improvement in general education but also to the special education of anti-tuberculosis and medical inspection schemes, establishment of district nurses, and similar work. There were probably many minor factors—diminishing birth rate, cleaner milk, better medical nursing and midwifery services, diminished horse traffic, tarred roads and improved sanitation. But it was to education and the creation of a sense of responsibility, and not to material conditions, that so much improvement was due. Everything pointed to the improvement being permanent and progressive. The decrease affected every type of district and every part of the country.

ENGLAND AND WALES: BIRTH RATES, DEATH RATES AND INFANT MORTALITY RATES

Years	Birth Rate	Death Rate	Infant Mortality	Increase or Decrease	
1841–1850	32.6	21.6	153		
1851–1860	34.1	21.2	154	+ 0.6	
1861–1870	35.2	21.3	154	0.0	Education Act, 1870
1871–1880	35.4	20.3	149	— 3.2	Public Health Act, 1875
1881–1885	33.5	18.7	139	— 6.7	
1886–1890	31.4	18.5	145	+ 4.1	
1891–1895	30.5	18.5	151	+ 3.9	Housing of the Working Classes Act, 1890
1896–1900	29.3	17.6	156	+ 3.2	
1901–1905	28.2	16.0	138	— 11.5	Midwives Act, 1902
1906–1910	26.3	14.4	117	— 15.2	Education Act, 1907; Notification of Births Act, 1907; Children Act, 1908
1911–1915	23.6	13.8	110	— 5.9	National Insurance Act and Tuberculosis Order, 1911; Notification of Births (Extension) Act, 1915
1916–1920	20.1	13.7	90	— 18.1	V. D. Regulations, 1916; Maternity and Child Welfare Act, 1918
1921	22.4	12.1	83	— 11.0	
1922	20.6	12.9	77		

THE MISSOURI STATE FAIR SCHOOL

COMPLETING the twelfth year of its existence as a unit of the Missouri State Fair, the Boys' State Fair school closed its 1923 session on Saturday, August 25, after finishing a course considered the most successful since its inception.

One hundred and twenty-four boys, representing every county of Missouri, after attending the eight-day session of the school, left for their homes possessing a new idea of the greatness of their state and thoroughly imbued with the spirit of progressive farming.

W. G. Dillon, superintendent of instruction at the State Fair school, announced his complete satisfaction with the progress made at the 1923 session. R. K. Phelps, assistant superintendent, stated that the course had been complete in every detail, surpassing the expectations of those who worked for its success. Both are members of the State Department of Education.

The boys are leaders of the schools in their home counties. Each was selected by competitive examination, after having made the highest averages in tests covering general grade and high-school subjects, to be the guests of the state during the week of the exposition.

The boys were housed in a canvas city, comprising thirty tents used for sleeping quarters and one large assembly tent.

According to Superintendent Dillon, all the boys that attended were from farms. The program of the school is almost wholly pertaining to agriculture and designed to make better Missouri farmers. The boys range in age from 12 to 17 years and, according to the superintendent, are quite impressionable. They will take the ideas gleaned from their experience at the fair to their own farms, where the fruits of their knowledge will be made manifest by increased production in the years to come. Better farming in Missouri is the paramount idea of the school, according to Dillon, and the work done by the students and instructors at the Boys' State Fair School will be a lasting investment in better Missouri.

SCHOOL EXHIBITS IN MISSOURI

EDUCATIONAL exhibits in the Educational Building at the Missouri State Fair, held at Sedalia, August 18 to 25, were more extensive and of better workmanship this year than in previous years, according to the officials in charge of the departments. This year there were four sections, country schools and town schools, high schools and special schools, with 140 classes in all. Approximately 2,000 separate entries were listed and judged.

Charles A. Lee, Missouri state superintendent of public schools, was director of the display. A. C. Moreland of Jefferson City, superintendent, was assisted by Miss Elizabeth White of Jefferson City.

The Lexington public schools won sweepstakes in first year sewing classes. In a special department, where teachers and supervisors were in competition, Miss Rose Green and Mrs. Clara Marshall, of Hannibal, took first and second awards for the best original illustrated method for teaching subject matter to students. J. A. Wisdom of Chillicothe took third.

A special department was given to Lincoln University, a negro school at Jefferson City. The work included the making of shoes, wearing apparel for both men and women and exhibits of wood work from grade pupils. This display was most interesting and was visited by thousands.

For the first time in its history, the Missouri Sunday-school association presented an exhibit of educational work, done by Sunday-schools in the state. Miss Harriet Edna Beard, acting general secretary of the association, was in charge. An illustrated story hour and song session at 10:30 each forenoon, under supervision of Miss Beard, attracted many children to the Woman's Building.

County school exhibits were sent in from Henry, Atchison, St. Clair, Moniteau, Warren, Washington and Vernon counties. Vernon won sweepstakes prize for best all-round county exhibit.

In the advanced departments many exceptional exhibits were on display. In the manual training departments and domestic arts division, beauty of design, construction and workmanship were noteworthy. Pen and ink drawings, costume designing and poster work formed an attractive display in every booth where entries were hung.

THE LA SALLE–PERU BUREAU OF EDUCATIONAL COUNSEL

THE La Salle–Peru Township High School at La Salle, Illinois, will establish in the year 1923–1924 a Bureau of Educational Counsel. The object of the bureau will be to give to the pupils of the school both general and individual intelligence, character and occupation tests, with

a view to proper planning of courses and selection of careers and vocations; to study the cases of "difficult" pupils and to plan constructive measures for their ethical and social reconstruction.

In connection with the bureau the usual functions of the educational, ethical and vocational guidance departments will be carried out. The bureau will also perform for the community represented by the school functions of a mental hygiene clinic, and will follow up by psychiatric social work the mental health study recently made of all school children in the La Salle-Peru-Oglesby district. In this survey, which was the first mental health survey made in Illinois, 6,500 children were examined and from this number certain problem cases were selected for special medical, psychological and social examination. The Bureau of Educational Counsel will be presided over by a trained psychiatric social worker, who will have an assistant and a special office with the proper equipment. While using all the experience and all the results of the recent psychological research, the bureau will be one with purely educational ends in view and will avoid all pathological connections and the over-emphasizing of abnormality.

This work was made possible by the generosity of Mrs. C. H. Matthiessen.

VOCATIONAL GUIDANCE AT LAKE FOREST COLLEGE

THE faculty committee on vocational counsel at Lake Forest College last year arranged a series of talks on some of the vocations open to college students. Whenever possible, the speakers were available for conferences. The introductory address on "How to Choose a Vocation" was delivered by Dr. Chas. W. Gilkey after a college dinner; Mr. Arthur H. Carver, of Swift and Company, spoke on the general subject of "Business" at a similar dinner. The following talks were made at the regular chapel period:

Architecture—Mr. Alfred H. Granger, Chicago.
Engineering—Pres. W. H. Raymond, of Armour Institute.
Teaching commercial subjects in High Schools—Mr. Wm. Bachrach, supervisor of commercial work in the high schools of Chicago.
Nursing—Miss Carol Martin, central council for nursing education.
Physical Education—Mr. J. G. Hoffer, director of physical activities, Y. M. C. A. College.

Plans for next year include a continuation of such talks, the selection of subjects to be governed in part by an informal census of the students' vocational choices and interests. An attempt will be made to keep accessible to students an up-to-date index of books and periodicals in the college library which contain vocational material.

FEDERAL-AIDED VOCATIONAL SCHOOLS

THERE are now nearly five thousand federally-aided vocational schools, enrolling 475,000 students, according to a statement by Harry L. Fidler, vice-chairman of the federal board for vocational education. Mr. Fidler's statement says:

A summary of the five years' growth under the act tells a remarkable tale of progress. At the beginning of the fiscal year 1922–'23 there were nearly 5,000 approved vocational schools in operation in the states receiving federal aid.

A total of 475,000 pupils were enrolled. In addition, 171 teacher-training institutions had been organized, with an enrollment of over 18,000 prospective vocational teachers, who were being trained to man the new school system.

Under the federal act, states which accept the federal funds are required to appropriate for vocational education from state or local money an amount equalling the federal grant, but in practice they have greatly exceeded this requirement.

In the fiscal year 1921–'22 the states and local communities appropriated two and one half times as much for their vocational schools as they received from the federal government. The total expenditure for these schools from all sources in that year was $14,770,000. Of this $3,854,000 was from federal funds.

The federal act provides that the federal money available to the states shall increase each year until the permanent maximum is reached in the year 1925–'26. For the current year, 1923–'24, the federal grant available to the states will approximate $5,190,000.

YOUNG MEN'S CHRISTIAN ASSOCIATION SCHOOLS

CLASSES are conducted in nearly 400 Y. M. C. A. branches throughout the United States.

according to a bulletin just issued by the United States Bureau of Education. Surveying the system of Y. M. C. A. schools, Mr. William F. Hirsch, who prepared the bureau's report, shows that the beginnings of the work go back to 1866, when four associations had 60 students in evening class work.

By 1915 the number of associations carrying on educational work had increased to 468, and the total number of different students was 83,771. "During the war period many associations dropped their educational departments, so that only 253 branches reported such classes for the school year 1918–19, but the number of students enrolled increased to 86,734," says Mr. Hirsch. The report continues:

> Realizing the need for standardization in the instruction given, "Y" educational leaders called a conference in Detroit in 1919 at which 146 delegates representing fifty-four associations were present. An educational council, composed of two delegates from each of the local associations maintaining educational work was formed. This council selects from its number a board of fifteen men which is responsible for carrying out the policies and purposes of the council. This work is centered in the headquarters in this city.
>
> Since the Detroit meeting, standard outlines have been prepared in more than seventy unit subjects and in several four-year college grade curricula, making a total of 150 unit courses now comprehended in the standardization plan. Latest reports show that 365 associations are conducting classes, while the average registration for the three years from 1920 to 1922 inclusive was 120,205.

The students in the association schools range in age from fifteen years to well past fifty. The great body of students, however, is in the age group of twenty-one to twenty-nine, with the average age of the total student body for the last school year at approximately twenty-five years. During the school year 1921–22 the percentage of students taking the various types of subjects included 48.7 in commercial, 17 in industrial, 6.7 in professional, 14.1 in academic and 13.5 in social civic classes.

REPORT ON BARNARD COLLEGE

PROMISING results from psychological examinations, development of a physical efficiency test and successful working of the special honors system are recorded in the annual report of Miss Virginia C. Gildersleeve, dean of Barnard College, made public at Columbia University last week.

Enlarged programs in Fine Arts, economics and science, and government are announced. Foreign lecturers will visit Barnard next year, and plans are under way to cooperate with women's organizations in the field of politics.

The total registration for the year was 925, a gain of ninety-eight over the previous year. "This is about as many students as we can accommodate," says Miss Gildersleeve. "Not much further increase should be permitted until we can erect a new academic building."

The Barnard trustees, it is stated, have adopted in principle the policy inaugurated by Columbia University of establishing a restricted number of professorships at high salaries. The report says:

> We should have at Barnard, in proportion to the number in the rest of the university, at least one professorship at $10,000 and three at $7,500. We have at present only two at $7,500. As soon as the finances of the college permit, additional ones will be established. It is to be hoped that this may be done in the near future, for no need of Barnard is of more importance than adequate recognition and compensation of the scholarship and teaching of its professors, on whom the whole value of the institution depends.

Of the results of last Autumn's psychological tests, applied to students with unusually good school records, the report says:

> Thirty-two were admitted in this way, besides twenty-one on combinations of psychological tests and certain college entrance examinations. It is too soon to judge of the success of this new plan of admission, but so far the results seem promising. On the whole, the students have seemed this year to be of unusually good quality. The careful selection of the committee on admissions is apparently producing satisfactory results.

CONFERENCES AT THE UNIVERSITY OF WISCONSIN

Two important conferences held their sessions at the University of Wisconsin during the first week of September. The National Conference on the Science of Politics held its first session on September 3 and continued until September 8. The meeting was sponsored by the American Political Science Association, and some 200 in-

vitations were sent out during the summer. A number of round-table conferences are included on the program.

The members of the executive committee for the conference were Frederick P. Gruenberg, Professor A. N. Holcombe, of Harvard, Professor C. E. Merriman, Luther Gulick, director of the National Institute of Public Administration, and Professor A. B. Hall, of the political science department of the University of Wisconsin.

A large number of delegates attended the Fourteenth Annual Conference of the Chinese Students' Alliance, Mid-West Section, which was held September 4 to 11, under the auspices of the University of Wisconsin. This is the third time that the annual conference has been held at the University of Wisconsin, the other meetings being in 1911 and 1917.

The main theme of the conference was "The student's part in the reconstruction of China," and included (1) problems relating to Chinese students, especially to Chinese students in this country, and (2) national problems in which students have an important part.

The program included addresses, mass meetings, forum meetings, professional meetings and a business meeting of the section. Entertainments included athletic events, a track and field meet, swimming, tennis, basketball and canoe races, receptions, a banquet, a modern Chinese play presented by student actors, picnics and sight-seeing trips around the city.

APPOINTMENTS AND RESIGNATIONS AT CORNELL UNIVERSITY

THE Committee on General Administration of Cornell University on August 11 accepted the resignation of Archie M. Palmer, '18, as secretary of the College of Arts and Sciences, and appointed C. Wilson Smith, of the University of Missouri, to take his place and as assistant professor of education. Mr. Palmer takes a position on September 1 with Proctor and Gamble, Cincinnati, Ohio, as a member of the sales force.

Professor Smith, the new secretary of the Arts College, studied at the University of Cincinnati and received his degree in law from the University of Colorado. He also has a degree in arts from the University of Missouri, where he has taught English for several years, and a master's degree in education from Harvard.

The trustees also accepted resignations of Dr. Maude Etheredge, medical adviser of women; J. Lakin Baldridge, '15, from the College of Architecture; Dr. E. P. Bugbee, assistant medical adviser for men; R. W. Moore, instructor in agricultural chemistry; John D. Sullivan, instructor in chemistry, and Allen B. Campbell, instructor in mathematics.

They appointed William B. Campbell, instructor in mathematics; Robert B. Corey, instructor in analytical chemistry; Dr. Jenette Evans, '14, to be medical adviser of women and instructor in hygiene; Dr. Elizabeth Fulton, '18, to be assistant medical adviser of women and instructor in hygiene; Ellsworth J. Carter, '14, Charles J. Haskin, '24, and Frederick C. Root, '24, to be student assistants in the law library; L. O. Morgan to be assistant in anatomy; Elmer Pendell to be instructor in economics; Alfred Rive to be instructor in economics; Leo Gershoy and C. L. Benson to be assistants in ancient history; Miss R. L. Dielmann, reader in ancient history; David H. Wilson, assistant in English history; Wilson Coates, F. G. Marcham and Hartley Simpson to be readers in English history.

EDUCATIONAL NOTES AND NEWS

REV. DR. WILLIAM ARNOLD SHANKLIN has resigned as president of Wesleyan University and becomes president emeritus. During President Shanklin's leave of absence Stephen H. Olin, of New York, has been acting president. Professor Leroy A. Howland, vice-president, has now been appointed to this office.

DR. PAUL E. TITSWORTH, dean and professor of English at Alfred College, has been elected president of Washington College, Chestertown, Md. Dr. Titsworth, who is 42 years old, is a graduate of Alfred and received his degree of doctor of philosophy at the University of Wisconsin.

DR. OTTO E. KRIEGE has withdrawn his resignation as president of Central Wesleyan College in response to the request of trustees of the college.

MRS. MARGARET MCALEENAN, of Brooklyn, has been appointed to succeed Mrs. Emma L.

Murray on the New York City Board of Education, her term extending till 1930.

MISS LENA M. ZIPFEL has been restored to duty as a teacher by the New York City Board of Education and has been granted $16,661, her salary with interest since she was dismissed from the school system on June 28, 1916. This action was taken by the board in compliance with a bill passed by the New York State Legislature and a court order entered as a result of that legislation.

DR. HERBERT U. ROGERS, formerly an instructor in psychology at Yale University, has accepted the appointment of chief investigator of a research on mechanical ability for the National Research Council. The investigation will be conducted at the University of Minnesota.

THE new director of the Vocational Service for Juniors, of the Bureau of Vocational Information, New York City, is Mrs. Mary Holmes Stevens Hays. Mrs. Hays has successively served in the juvenile courts of Chicago, the Rockefeller Laboratories of Social Science at Bedford Hills, the Surgeon General's office during the World War, the Scott Company as psychologist, and the staff of the Children's Bureau in conducting a national survey.

DR. AGNES ROGERS, who was professor of education at Goucher College, is taking up her new work as educational specialist at Smith College.

DR. J. C. MUERMAN, specialist in rural education of the United States Bureau of Education, has accepted a position as director of rural education of the Oklahoma State Normal School, Durant, with President H. G. Bennett.

HENRY S. CURTIS, of Oberlin, has accepted the position of director of physical training for the state of Missouri, with freedom for summer engagements for platform and university work.

MISS VICTORIA LYLES, of Wagoner, Okla., has been appointed assistant state rural school supervisor. Miss Lyles will assist Mr. E. A. Duke, general state supervisor, in looking after the rural schools, both white and colored.

WITH the opening of the year last week, organized vocational guidance work was begun in the public schools of Baltimore. The vocational and educational counselor in junior and senior high schools is Miss Leona C. Buchwald, formerly vocational secretary at Goucher College.

EARL N. RHODES, principal of the training school, which is conducted jointly by the State Normal School and city of Salem, Massachusetts, has resigned to accept a position at the Pennsylvania Normal School.

F. E. BALDWIN, of Hyde Park, has been chosen principal of the Sutton (Mass.) High School. Thomas Gay, of Bridgewater, has been elected superintendent of schools, succeeding Hermann G. Patt, resigned.

ARVINE BOWMAN, of Zanesville, O., has been elected superintendent of schools at Chillicothe, succeeding J. H. Mason. Mr. Bowman is a graduate of Western Reserve University and has been a student at the Chicago College of Education.

E. C. MOORE has been elected superintendent of schools and principal of the high school at Eureka, Ill. Mr. Moore succeeds G. W. Knudson, who has accepted a position at the University of Illinois.

MRS. KATE W. JAMESON, dean of women at the University of Arizona, has been appointed dean of women at the Oregon Agricultural College. Before going to Arizona, Mrs. Jameson was dean of women at Ohio State University.

CLAUDE W. OWEN, of Chase City, Va., has been elected dean of Bluefield College, at Bluefield, W. Va.

DR. ALFRED C. SCHMITT, of the school of commerce of the Oregon Agricultural College, is heading the newly established department of finance and administration of the school. Dr. Schmitt was vice-president for eight years and president for four years of the First National Bank of Albany, Oregon.

MISS GRACE W. RIPLEY, for six years head of the art department of the Massachusetts Trade School for Girls, has joined the staff of the Boston University School of Religious Education. She will be a member of the department of Fine Arts and Religion.

DR. ERNEST DE WALD, assistant professor at

Rutgers College, has been named assistant professor of fine arts in Barnard College, Columbia University.

KNOWLTON M. WOODIN, a graduate of Brown University, has been selected to head the department of biology at Norwich University.

AT the University of Missouri, Eli Stuart Haynes, of Beloit College, has been appointed professor of astronomy. Assistant professors have been appointed as follows: Dr. Glenn W. Morrow, of Cornell University, philosophy; Dr. W. B. Roberston, of the University of Kansas, zoölogy; Dr. Urban Tighner Holmes, of Harvard University, Romance languages, and Dr. H. C. Howard, Jr., analytical chemistry.

THE increased appropriation, voted by the eighty-fifth General Assembly of Ohio to the Bureau of Special Education and Psycho-Educational Clinic of Miami University, has enabled the bureau to increase its staff, to enlarge its facilities for training teachers and supervisors for special classes for subnormals, delinquents and speech defectives, and psychological examiners, and to open a branch station at Cleveland. In addition to the director, Dr. J. E. W. Wallin, the staff included the following: in the Dayton center, Mrs. Jessie Wilson, M.A., (Michigan), and Miss Janet Holcomb, M.A., (Columbia), psychological examiners and instructors; Miss Mildred Grimes, B.A. (Western Reserve, and graduate at Columbia), critic teacher and instructor in industrial arts; Miss Eva Nutting (student in the Bureau of Special Education, Miami University), critic teacher; and in the Cleveland branch, Bertha M. Luckey, Ph.D. (Nebraska), and Treva Witherstay, critic teacher. Students are admitted from all sections of the country without other charges than a nominal registration fee.

TEACHERS of Los Angeles have made application to the board of education of that city to be placed on a single salary schedule. The request was made by a committee representing the various groups in the school system. This committee included Charles J. Reinhard, principal, West Vernon Elementary School; Dr. A. P. Wilson, of Manual Arts High School, representing the high-school principals' association; Ida Christine Iverson, president of the Los Angeles city teachers' club; W. L. Ricker, vice-principal of Polytechnic High School; Eugenia Jones, representing the kindergarten teachers; Dr. Herbert True, of the health and development department; Irving Raybold, representing the night school teachers; Richard Harrison, representing the special schools; Charles Morris of the evening high school teachers, and John C. Abbott, representing the high-school teachers' association.

A SERIES of lectures on international problems will be held this month at the Nobel Institute of Christiania, Norway. Among the lecturers, each of whom will deliver about ten lectures, is Professor James Shotwell, of Columbia University. Dr. Shotwell, who is the editor of the work published by the Carnegie Endowment for International Peace, on "The Economic and Social History of the World War," will discuss the international problems of political economy which are connected with the World War. Professor George Weill is to lecture on "Social movements in twentieth century France and their effects." The young Austrian jurist and pacifist, Professor Rudolf Laun, will lecture on "The nationality question in constitutional and international law." Professor Edward Bull, of the University of Christiania, is to discuss the outbreak of the world war, as viewed from newer publications.

DONNA SANTA BORGHESE, of Rome, Italy, will give a course on "Contemporary movements in Italian literature" at Barnard College, Columbia University, this winter. She was the Italian representative at the World Conference on Education at San Francisco in July.

DR. BIRD T. BALDWIN, of the Iowa Child Welfare Research Station, will give from October 22 to 25 a series of addresses before the California State Teachers Association on "The relation of physical and mental growth of pupils to school progress."

DR. EARL BARNES, of Philadelphia, and Miss Laura Zirbes, investigator of reading, Teachers College, Columbia University, were speakers at the teachers' institute of the Bethlehem, Pa., school district last week.

SPEAKERS at the sixth annual conference of State Normal Schools of Massachusetts at Bridgewater, September 5–7, included Dr.

Charles H. Judd, of the University of Chicago School of Education; Henry Neumann, of the Ethical Culture School, New York City; Albert G. Eldredge, North Adams, Mass., and Earl N. Rhodes, Salem, Mass.

GEORGE WHITE, a retired school principal who served in the New York City schools for more than fifty years, returned last week from Europe, after traveling for two months in Spain and France.

DR. HENRY F. COPE, general secretary of the Religious Education Association, died at Shelby, Mich., on August 3.

THE new Jesse H. Metcalfe Memorial Laboratory of Chemistry at Brown University will be dedicated on October 10.

THE will of Angier B. Duke, who was drowned on Labor Day at Greenwich, Conn., gives $250,000 to Trinity College, Durham, N. C.

A TRACT of 900 acres in Fayette County, Ohio, has been donated to Ohio Wesleyan University by Charles Persinger, of Washington Court House, Ohio. The property is valued at $150,000.

THE alumni and friends of Bucknell University have completed the raising of $500,000 for the erection of a stadium, a new gymnasium and a new athletic field. A portion of the new engineering building has been completed at a cost of $100,000 and will be ready for occupancy this school year.

THE Edward Rector Scholarships, at De Pauw University, donated for some years by Edward Rector, of Chicago, have been widened in their scope. Formerly confined to students of Indiana, they are now available to high-school students of other states who pass the requirements for membership. One hundred scholarships of $125 each for four years are awarded annually to high-school graduates who stand high in character and scholarship.

IN order to provide near-by quarters for students, New York University has purchased for $250,000 the five-story apartment house at the southwest corner of University Avenue and One Hundred and Eighth Street.

A CAMPAIGN for one million dollars to increase the endowment of Bucknell University has been inaugurated by President Emory W. Hunt and his assistant, Dr. Joseph R. Wood, as executive secretary. The board of trustees at a recent meeting determined that this amount is necessary in order to raise the salaries of the teaching staff and to maintain adequately the present equipment of the university. The General Education Board has promised $200,000 if the university raises $450,000 by December 31, 1924. The campaign will be under the direction of the board of trustees and a special committee of one hundred alumni and friends of the university.

AN effort to re-initiate a constitutional amendment that would outlaw private and parochial schools in Michigan has failed. The petitions carried 55,945 names whereas 58,367 are required.

THE voters of Southington, Conn., have asked the Russell Sage Foundation to appoint a committee of three to investigate school conditions in the town for the past five years and to make a public report. It is reported that at the close of the school term in June five teachers were not re-engaged and eight others were placed on probation.

UNDER a new salary schedule adopted by the board of education, Pomona, Calif., the payroll will amount to between $250,000 and $275,000. Fifty teachers in the elementary schools will draw $24,000 at a maximum of $1,600, and six kindergarten directors and ten assistants will be paid $10,800 annually. Thirty-three teachers in two junior high schools will be paid a maximum of $1,900 each, or $62,700 for the year. Thirty-nine teachers in the high school and junior college draw $93,600 annually.

THE school board at Cambridge, Mass., has accepted a recommendation of the superintendent and the city auditor that women teachers in the high school be granted increases of $180 a year, and elementary teachers increases of $192 a year. The salary of the superintendent has been raised from $6,000 to $7,500 a year.

THE 250 teachers of the Brockton, Mass., public schools have been granted an increase of $100 a year, beginning with the term which opened last week.

MORE than one hundred students at the normal school summer session at Keene, N. H., have signed contracts for teaching positions. However, superintendents from all over the state are still seeking teachers, as many positions yet remain unfilled. The demand for teachers for the New Hampshire schools far exceeds the supply of teachers graduated by the State Normal School.

OF the 12,966 students enrolled in the three vacation high schools of New York City this year, 9,740, or approximately three fourths, have earned certificates testifying to the fact that they have succeeded in making up or advancing a term as a result of their eight weeks of summer study.

THE cost of educating a child has more than doubled in the last ten years, according to statistics made public recently by the board of education of Philadelphia. In 1913, the per capita cost of education was $36.55. In the fiscal year just terminated, it cost $74.90 for each pupil enrolled in the elementary and high schools of the city. There has been a jump of $12 per pupil in the last year alone.

ALTHOUGH continuation schools have been established in 43 states, with compulsory attendance in more than half of the states, only one tenth of the boys and girls between the ages of fourteen and seventeen reported by the census of 1920 as not attending school of any kind are enrolled in the part-time schools, according to Dr. William T. Bawden, of the United States Bureau of Education, who writes a review of progress in vocational education for the biennial report of the United States commissioner of education. Dr. Bawden urges the extension of compulsory education laws to include the eighteenth year.

TECHNICAL commercial subjects are now accepted for admission to college by a large number of institutions, according to figures compiled by Dr. Glen Levin Swiggett, specialist in commercial education in the United States Bureau of Education. Of 480 colleges and universities reporting in 1922, 275 accept credits in bookkeeping, 273 in stenography and typewriting, 78 in merchandising, and 59 in office practice.

TEACHING leads as the vocation for women college graduates, according to a study of the occupations of recent graduates of five women's colleges made by the Bureau of Vocational Information. Of 1,305 young women who were graduated from Barnard, Goucher, Radcliffe, Smith and Wellesley, 556 are reported to be gainfully employed and more than half of this number, or 355, are teaching. The second largest group of graduates, numbering 156, are engaged in graduate and professional study, many of them taking courses in schools of education.

SALARY increases to elementary-school principals, evening-school teachers and other members of the teaching staff were included in the school budget estimate recently adopted by the New York City board of education. The new rates call for salaries of $3,750 to $4,750 in the case of principals of elementary-school buildings without junior high-school department, and having not less than 25 or more than 48 classes. For schools of the same size but with a junior high-school department the salaries are $3,950 to $4,950. For schools having 49 to 84 classes the salary range is set at $4,000 to $5,000 in buildings without the junior high-school and $4,200 to $5,200 in schools with junior high-school departments. Principals of schools having more than 84 classes will receive salaries ranging from $4,250 to $5,250 if there is no junior high-school and $4,450 to $5,450 if there is. Teachers in evening elementary-schools will receive $4.50 a night for the first three years of service and $5.50 thereafter. Requests for increased pay for other officers, particularly district superintendents, day high-school principals, day high-school first assistants, vacation elementary-school teachers, vacation high-school teachers, visiting teachers and substitute teachers were denied with the statement that "the board of superintendents perhaps could establish a basis for the future favorable consideration of some of these requests if they can suggest ways of coordinating and eliminating activities and subjects so that fixed costs may show a reduction. The budget provides for more than 30,000 teachers and supervisors in the day and evening schools.

AUGUST the thirteenth was celebrated at the Wood's Hole Marine Biological Laboratory as the fiftieth anniversary of the founding of the

Penikese school by Louis Agassiz. In commemoration of this school, a bronze tablet has been cast in duplicate with an inscription as follows: "In commemoration of the Anderson School of Natural History established fifty years ago on the Island of Penikese by Jean Louis Rodolphe Agassiz, born 1807–died 1873, the Marine Biological Laboratory, the direct descendant of the Penikese school, erects this tablet, 1923." The original tablet is to be placed on a boulder on the Island of Penikese, and the replica in the Marine Biological Laboratory. The celebration consisted of speeches by three of the staff of the former Penikese school, Dr. David S. Jordan, Dr. Burt G. Wilder and Professor Edward S. Morse; by one of the former students of the school, Dr. Cornelia M. Clapp, and by Professors Hermon C. Bumpus, E. G. Conklin and Frank S. Lillie. It was emphasized that it was Agassiz's methods rather than his conclusions which made him the "master teacher," that he taught his students to get their facts from nature and to think for themselves.

IN April, 1922, the St. Louis Medical Society offered free treatment to crippled children at a series of clinics. The society found, on investigation, that these children were handicapped by lack of educational facilities. Fifty-eight crippled children were found unable to attend school because of their condition, while more than 200 in attendance were backward, and were unable to climb stairs or move from one classroom to another. The board of education was informed of these conditions. At its session, July 10, it decided to open a temporary school for crippled children for the coming term, and $40,000 was voted for equipment. Plans will be made for a permanent building, based on experience with the temporary school.

THE national convention of the American Association of University Women meeting at Portland, Oregon, with a large attendance, went on record in favor of the establishment of a federal department of education with a secretary in the cabinet. This resolution was passed following an address by Miss Charl O. Williams, field secretary of the National Education Association, in which she alluded to the education bill now before Congress. Other action included the adoption of a definite program designed to "help the school to find its place in the community of to-day"; a resolution favoring the establishment of a committee on reciprocal relations with foreign organizations whose activities are similar to those of the American Association of University Women, and endorsement of a plan for international fellowship worked out by the international federation of university women.

SPECIAL CORRESPONDENCE

THE FEDERAL TECHNICAL SCHOOL IN ZURICH

THE war and the peace have brought few changes to the Swiss Federal Technical School, or "The Polytechnikum," as it is locally known. The new addition to the main building, which makes of the whole building one of the most imposing structures in Switzerland, is practically finished and will provide much needed space for lectures and conferences. Aside from this, very little new equipment has been furnished the school by the state, due to the necessity of cutting appropriations for reasons of general economy. However there has been no apparent fall in standard, as the equipment is adequate and, as usual in Europe, more weight is placed upon the quality of instruction than upon perfection of laboratory facilities. The teaching force remains on the same high level as before, with remarkably few changes in personnel. France, Italy, Germany and Austria, which used to compete with the Swiss for professors of technology, have little to offer the recipient of Swiss francs, so that the school has been able to hold more of its brilliant men than formerly.

It is chiefly in the make-up of the student body that the observer notes a marked change. It was once the pride of Switzerland and of the Polytechnikum that the famous school was international as far as its student body was concerned. Foreign students were welcomed and treated on exactly the same terms as native Swiss, so that before the war it was not unusual to find as high as 50 per cent. of foreigners in the engineering section of the school. During the war Swiss institutions were threatened with an inundation of foreign students from the surrounding nations and, in order to

protect the native students who were practically forced to remain in Switzerland, they were compelled to give the natives priority rights and, in addition, to increase tuition and other fees. Although it was against the traditional policy of the Polytechnikum and against the better judgment of certain members of the Federal School Council, the Technical School was forced to follow suit. The tuition for Swiss was raised to 300 francs a year, an increase of 100 francs, while foreigners were and still are charged 600 francs a year with laboratory and other fees in the same proportion. The result is the practical elimination of students from countries whose exchange is low and a marked reduction in the total number of foreign students generally. The enrollment for 1920–21 was 2,011, of whom 365 were from other countries. Twenty-nine foreign countries were represented by the 365 students. Norway was first with 42, Roumania second with 29. Other countries with a total of 14 or more were Germany, France, Holland, Italy, Turkey, Poland, Greece, Jugo-slavia, Russia, Hungary and South America (grouped together). The United States was represented with two students.

The total attendance has been maintained since the war by local patronage. Before the war large numbers of Swiss students spent some of their semesters at German or Austrian technical schools. Since 1919 lack of funds, difficulty in obtaining satisfactory quarters, and the over-crowding of German and Austrian schools have kept the Swiss at home, much to the regret of thoughtful Swiss engineers and educators who appreciate the value of the former free interchange of students.

The Polytechnikum is still operating under the general federal regulations of 1908, with a few minor modifications. The organization of the school is not unlike the organization of certain of our state universities. As it is a national institution it derives the greater part of its income from indirect taxation and is consequently dependent upon the Federal Council and the Federal Assembly for its existence. The total amount of the federal appropriation is at present, 1922–23, approximately 2,200,000 francs, tuition and other fees bring in about 500,000 francs, making a total of 2,700,000 francs annually from which all the expenses, salaries, upkeep, etc., are paid. The Federal Council appoints the School Council, its president and vice-president for a period of five years; elects the professors (a perfunctory matter as the nominations usually originate in the faculty or school council and are merely ratified by the Federal Council); fixes the salaries; presents to the Federal Assembly the annual budget of the school and all other matters for which legislative authority is necessary; audits the annual accounts of the school and accepts or rejects legacies.

The immediate executive power is exercised by the school council the president of which is practically the president of the school in the American sense of the term. The council consists of seven members, *i.e.*, six beside the president, who act as supervisors and, in a sense, trustees. With the exception of the president who receives a specified salary and has his permanent residence at the school, they receive the same pecuniary recompense as the members of the Federal Assembly commissions. The duties of the council are numerous and varied, comprising roughly the duties of the president, trustees, and supervisors of an American college. It is supposed to see to it that instruction is given according to the curricula and general regulations. It appoints the rector and vice-rector of the school upon the nomination of the general faculty, the secretary, curators, directors of scientific institutes, librarians, legal and financial assistants, laboratory assistants and other minor employees. It makes up the school budget, fixes the salaries of the persons it appoints, determines the amount of student fees to be paid to professors, determines tuition and laboratory fees, grants scholarships and students' aid, divides state appropriations among the various departments, fixes the dates of the semesters, names the library committee, controls student discipline, sees to it that "the city of Zurich and the state fulfill their obligations toward the school," makes an annual report to the Federal Council on the progress of the school, approves curricula and grants diplomas. These are the most important of the council's duties. As with us the president and his secretary perform most of the real work, the other members of the council acting chiefly in an advisory capacity. The president has, according to the regulations, other duties to perform mostly in cases of emergency where he

is empowered to act upon his own initiative.

The general faculty is composed of all the professors, assistant professors and other teachers of the Polytechnikum. It meets at least once a year and may be convoked by the rector, the president of the school council or by petition of its own members. The duties of the general faculty are to nominate the rector and vice-rector and to discuss matters pertaining to the welfare of the school and make recommendations and "to bring to the attention of the authorities useful reforms."

The rector and vice-rector are appointed for a period of two years. Only full professors are eligible. They may be reelected but may not serve more than three successive terms. The rector is relieved from part of his teaching work during his period of office. He attends the meetings of the school council but has no vote. His chief duties are to preside over the general faculty, transmit to the council the recommendations of the faculty, build the roster of hours, pass on the admission of special students, keep student rolls and records, provide for all examinations, and in general supervise and advise students on questions of curriculum and discipline. The office bears a certain resemblance to that of some American deans.

The Polytechnikum is divided into eleven departments of which ten are special schools: I. School of Architecture. II. School of Civil Engineering and General Engineering. III. School of Mechanical Engineering (including Electro-technology). IV. School of Chemistry. V. School of Pharmacy. VI. School of Forestry. VII. School of Agriculture, 2 parts. VIII. Department of Mathematics and Physics. IX. Department of Natural Sciences. X. Military School. XI. General Department (not a school) Section A. Arts, philosophy, language, political economy, history, etc. Section B. Mathematics, natural science and technology.

Each of these departments has a faculty of its own to which all the teachers who give instruction in the department belong. Teachers of lower grade than a full professor have a vote only in questions which concern their own teaching. The departmental faculties elect their own chairmen who serve for two years, are eligible for reelection but may not serve for more than three successive terms. In each department all instruction is nominally under the supervision of the departmental faculty which also has the right to appoint delegates to advocate its cause before the school council, the president or the rector. In addition these faculties receive reports on students, preserve discipline with jurisdiction in certain cases, announce the results of examinations and submit to the school council before the beginning of the semester a list of proposed courses, recommendations, etc.

The duties of the chairman of a department are to see to it that instruction in his department is in conformance with "the aim pursued" and to submit to his faculty all proposals designed to raise the level of instruction and perfect it. He is a member of the entrance committee *ex officio*, keeps the student records and transmits them to the rector, gives the students of his department advice concerning their work and carries out the decisions of the departmental faculty.

The chairmen of all the departments form an advisory committee which meets at the call of the president of the school council or the rector or when three chairmen request a meeting. This committee is useful principally in the cause of uniformity in the carrying out of school regulations, decrees of the school council, etc. It has no executive power beyond that possessed by its individual members. It discusses questions which have been brought up in the general faculty or departmental faculties but has no legislative authority.

The professors and other instructors have the usual rights and privileges possessed by European university teachers. The basic salary varies according to the type of professor. As a general rule the school pays more for its technical men than for its professors of pure science or its professors of history, literature, etc. In addition to the fixed salary the professor receives a contribution toward his pension, a share in examination fees and a share in student fees. The professor's share in student fees is regulated by law. He receives one franc per student per hour of either lectures or exercises but the maximum amount he may receive is fixed by the school council. If there is a surplus remaining it is placed in a general fund which is later divided in equal shares among the professors.

The number of hours instruction required from the individual professor varies according to the terms of his contract. In general, judged by American college standards, the total number of hours instruction demanded seems reasonable. The average is not far from 10 hours a week. It is difficult to get at the actual number as many of the laboratory courses, and other exercises are merely supervised by the professor under whose name they stand in the catalog. Less work is expected of the professor acting as rector, vice-rector, departmental chairman, director of institute or in some other executive capacity.

Outside work is not only sanctioned but is encouraged among the professors of technology. The extent to which professors may employ their time in outside work for personal gain is left entirely to the conscience of the individual. The policy of the school council has been to fill a professorship with a man who could be trusted and then to trust him. Some of the better known professors probably receive large incomes from consultation and other fees for professional work and, judging from the complaints which are made now and then by ordinary engineers, the practice has, in some cases, gone too far. However, the liberal attitude of the school council toward outside work has undoubtedly helped the school to keep some of its ablest men and, in spite of the adverse comments of outsiders, the same liberality will probably be practiced in the future.

Instruction is given in German, French or Italian by lectures, laboratory and drawing exercises, the so-called *Repetitorien* and seminaries. The *Repetitorium* is a sort of conference between the professor in charge of a course of lectures and the students. Originally it was a genuine question and answer recitation not unlike the class room work of an American college. The purpose was avowedly to drive home and clinch the matter given in the lectures, more attention being paid to elaboration and explanation of difficult problems and theories than to quizzing the student. In recent years these recitation periods developed or degenerated, according to viewpoint, into more or less informal meetings in which the student may present his difficulties. Some instructors have returned to the old methods and the general trend seems to be that way not only in the Technical School but likewise in the University of Zurich where it was surprising to find a number of professors really teaching instead of lecturing and a general discussion going on as to the advisability of requiring a certain amount of class room work of each professor. It is a revolt against the pure lecture system which, it is insisted, is a relic of the days when there were no books, and against the filling of class rooms with young ladies and gentlemen of easy conscience who find in the lectures a painless method of acquiring a little information which they are too lazy to get from a book. The approach to our American system is obvious.

The student seems on the whole to have a better time of it than his American counterpart. The technical courses have fixed *minima*, but there is greater freedom in the choice of elective work and in the regulations governing required work. Once the student is admitted he can take any work in his department for which he is fitted, as the lectures and exercises are given in such a manner that a student who remains a specified number of semesters is able to cover in that time all the work expected of him. Permission to substitute certain required work for other work is readily given for good cause.

Discipline is usually a simple matter, as the students are subject to ordinary civil law as well as the school regulations. Negligence of work, lack of respect for authorities and teachers, immoral and indecent behavior are expressly mentioned as punishable faults. Expulsion is the extreme penalty in the hands of the school council and is rarely made use of as the *concilium abeundi* is generally sufficient.

The regulations governing scholarship, or what might be called a progress rule, are different in the different schools. In the general engineering department the first preliminary examination for a diploma may be taken at the earliest at the beginning of the third semester and at the latest at the beginning of the fifth semester. In other words the student is allowed a maximum of two years in which to do one year's work. This first examination covers the following subjects: 1. Higher mathematics. 2. Descriptive geometry. 3. General geology. Numbers 1 and 2 count double toward passing the examination. The geology has a single

count. In addition approved note books and drawings must be presented in mathematical work, descriptive geometry and structures.

The second preliminary examination may be taken, at the earliest, at the beginning of the fifth semester and, at the latest, two years after the first preliminary. It covers mechanics, physics, petrography, theories of structures and mechanical engineering. Physics and mechanics have a double weight in determining grades, the other subjects single weight. Notebooks and exercises must be submitted as before with the approval of the professor concerned.

The final "diploma examination" may not be taken before the completion of the eighth full semester.

The method of determining by preliminary and final examinations the right of the student to be stamped *Diplomingenieur* in the general engineering department is fairly characteristic of the procedure in other departments. The curriculum estimates the time required for covering all class, lecture and laboratory work in normal cases. a. for the School of Architecture at 7 semesters; b. School of Engineering, 8 semesters; c. School of Mechanical Engineering, 7 semesters; d. School of Chemistry, 7 semesters; e. School of Pharmacy, 5 semesters; f. School of Forestry, 7 semesters; g. School of Agriculture, section A. 6 semesters, section B. 7 semesters; h. School of Master of Mathematics and Physics, 8 semesters and the same for i. School for Master of Natural Science. This estimate does not include the time spent upon thesis work. In general the time element is a secondary consideration although the various departmental faculties reserve the right to drop a student if, within a reasonable time, he has passed no diploma examinations.

The method has a good deal to be said for it. In placing the responsibility where it properly belongs, *i.e.*, squarely on the shoulders of the individual student, it helps make the student realize that his success or failure at the university, as in after life, depends chiefly upon himself. It frees the instructor from much of the petty annoyance connected with marks and standing, and, by rejecting a fixed passing mark, allows examiners sufficient leeway in sizing up a candidate's performance. The oral final examination is a severe test of the candidate's calibre and disposes effectively of the bluffers, while the extra weight laid upon the written work enables a slow-reacting student to justify himself. The result is either the acquirement on the part of the student of the necessary essentials without too much mothering by president, dean or faculty or the sudden and thorough elimination of the unfit. The school does not propose to assume any responsibility for getting anyone through. It practically says to the student: "Here is the best equipment we are able to procure and here are the best teachers we have been able to find. They are at your service to supply information and guide you in your work but they are not here to police you and not here to force you to work. Conduct and industry are your affair. Realize that and act accordingly."

The entrance requirements of the Polytechnikum are considerably more severe than those of any technical school in the United States with the exception of those few schools which demand either two or three years of arts work or a bachelor's degree as a prerequisite.

All applicants must present evidence that the applicant has passed his eighteenth birthday; a certificate from the preparatory school giving a full statement of preparatory work or a certificate showing that the applicant has passed the state examinations or the final school examinations; and a certificate of good moral character. On the basis of these certificates the rector decides whether the applicant will be admitted without examination to the school or be admitted to the examinations. Certificates of final examinations from those Swiss schools which have special agreements with the Federal School Council and certificates from foreign schools acceptable to the school council and the rector of the school are accepted for entrance into the first semester of any course.

The principles upon which the recognition of foreign certificates depends are established by the school council at the request of the committee on examinations.

A regular entrance examination is held immediately before the beginning of the school year (October) for the benefit of applicants who possess no satisfactory certificates. No applicant is admitted to this examination who has failed to pass the final examinations in a preparatory school having a special agreement with the school council. Applicants less than 18

years old may be accepted if, in the opinion of the rector, they have had satisfactory preparation and possess unusual ability.

The examination is divided into two parts. Part one covers general education and drawing, part two mathematics, physics and chemistry.

A solid foundation in general culture has always been insisted upon as the only proper basis upon which to start an engineering education and the examination in these subjects has been exacting and severe. More candidates are said to fail to satisfy the requirements in general culture than fail to pass the strictly technical requirements.

In mathematics not so much stress is placed upon wide knowledge of the various branches as upon the evidence that the candidate possesses a certain mathematical sense, *i.e.*, some readiness and ability in the grasping and solution of elementary problems.

Certain examinations may be dispensed with provided the applicant has a preparatory school certificate from a recognized school covering the subjects concerned. Examinations may be waived altogether in the case of older students who have been in practical work. In order to enter one of the higher courses the candidate must prove his fitness for such course by certificate or examination.

The holding of entrance examinations and all decisions concerning entrance are the province of the examination committee which is guided by the regulations of the school council. The committee is composed of the rector, the chairman of the various departments and the examiners who are selected by the school council for a period of two years from the teaching force of the Technical School. The president of the school council is present at all sessions of the committee in an advisory capacity. The rector is chairman. All entrance certificates are placed before the members of the committee.

The examinations are not public but in special cases the president of the school council or the rector may admit outsiders. At the end of the examination period the examiners meet with the other members of the committee to decide on the admission of candidates. The examination marks are the deciding factor but in doubtful cases the school record is taken into account. A fee of 20 francs is charged for entrance examinations.

One of the most interesting features of the Federal Technical School is the section known as XI A, the philosophical and political economy section. It forms, with section XI B, mathematics, natural science and general technology, a division of the Polytechnikum. This division is a regular department but not a school and leads to no degree. Any student 18 years old or over who can present a certificate of good behavior, is permitted to take courses in this department. The only restriction is in the case of students who have been dropped from some one of the technical schools. Applicants for admission to the technical schools, who have not passed their examination, are admitted as hearers (special students) to the lectures and exercises in department XI only.

Every regular student in each of the technical schools must elect at least one course in section XI A, the section for philosophy and political economy, during each of the semesters of his course. The catalog recommends especially attendance upon such lectures and exercises as "foster general culture."

The work in section XI A is mostly lecture work given usually late in the afternoon. The professors in charge of the work are chosen with particular care as they must be interesting as well as scholarly and must possess the ability to keep the attention of weary students. No examinations are required for the courses in the section and it lies wholly with the student whether or not he will go deeply into the subject presented. If three students or more elect a course it must be given. Attendance is in theory compulsory, but if the course is a large one it is perfectly easy for a student to absent himself if he so chooses. He receives credit for the course if he pays his fees and gets the professor's signature in his student's book at the beginning and end of the semester.

In spite of the great freedom given the student the lectures in the section are very well attended. Every inducement is offered the professor to make the work attractive and valuable. Extra remuneration from student fees is one powerful incentive. Then too the whole atmosphere of the place is saturated with cultural influences and even the professors of engineering give more than mere lip service to the cause.

Twenty-three professors teach in this section. The subjects offered in section XI A during

the first semester 1921–22 were: I. Literature, language and philosophy. a. In German Language and Literature, six courses. b. In Philosophy, three courses. c. In Pedagogy, two courses. d. In Italian Language and Literature, four courses. e. In French Language and Literature, four courses. f. In English Language and Literature, three courses. g. In Psychology, two courses.

II. History, Politics and Economics, Law and Finance, Sociology, 27 courses in all.

III. History of Art and Fine Arts. a. The Art of Antiquity. b. Architecture of the 15th and 16th Centuries. c. French Art of the 19th Century. d. German Art of the 19th Century. e. Modelling. f. Sketching and Free Hand Drawing. g. Plastic Anatomy and Perspective.

The emphasis laid upon this section does not mean that the authorities discourage work in mathematics and natural science. It is felt that the average student, however, will get his scientific training either as preparation for or as a part of his technical course; in fact, that there is great danger that the technical student will become too narrow and too materialistic without the counter influence which culture training furnishes. The proof of the pudding is in the eating. Talk to a graduate of the Polytechnikum and see what he knows about history, art, philosophy and literature and you will be astounded. This observation is the result of numerous conversations with graduates of the various schools, all of them fair average samples. Nor do I believe that the engineer suffers because of the culture he has acquired, as some of my American friends would have me believe. As a shop manager and contractor the Swiss engineer may not come up to the product of the American technical school. As an engineer pure and simple the world rates him high.

The Schools of Pharmacy, Agriculture, Forestry and Architecture, the Schools for Masters of Mathematics and Science and the division for Military Science have not been included in this survey. They are conducted along the same general lines as the more strictly technical schools. In the School of Pharmacy there are about 29 women, in the other schools 11, Architecture having 3, Chemistry 4, Mechanical Engineering 2 and Master of Science 2.

In the Engineering Schools a certain amount of practical work is required. This work is to be done during the vacations. The Mechanical Engineers are advised to have at least a half year of practical work before taking up their technical training or in certain cases to interrupt their courses in order to obtain this experience.

The Polytechnikum confers, besides the school diplomas, the degree of Doctor of Technology, Doctor of Science and Doctor of Mathematics based upon work done over and above that required for the diploma and the completion of a satisfactory thesis. The doctor's examination is like that at the ordinary university. Honorary degrees are conferred for distinguished service in science.

There are a number of conclusions which may be drawn from a study of the Polytechnikum, some of which may be suggestive for Americans. Comparisons are useless except where conditions are similar and, as this is generally not the case here, no comparisons will be made.

1. The preliminary and final examinations place great responsibility upon the student and enable him to get a view of the whole field in which he is working, a view difficult to obtain when the student's responsibility ends with a semester examination. In addition the system does away with much of the ranking in vogue elsewhere, the bugbear of many a professor. It saves the time of both student and professor during the actual semester as the examinations are not held during the regular term but either precede or follow it.

2. It seems clear that the Swiss are interested primarily (*i.e.*, in the Federal Technical School) in producing real engineers. By "real engineer" I mean a scientifically trained professional expert in technology, not a mere mechanic or contractor or business executive. Engineering is, therefore, a profession not a trade.

3. The Swiss believe and their practice confirms their theory, that an engineer needs time to develop and to study for his profession. The preliminary education is practically the same as that demanded for law, medicine, university teaching or theology and the number of semesters required for graduation compares favorably with the semesters required for the other professions.

4. It is the policy of the Polytechnikum to encourage the acquisition of general culture as a means of educating the student before and

during his professional course and as a means of furnishing him with interests outside his professional work.

P. M. PALMER

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DISCUSSION

SOME SOCIOLOGICAL SIDE LIGHTS UPON THE SCHOOL LIBRARY

THE groups of readers that come and go in a well-regulated school library reading room constitute one of the best examples that can well be pointed out of the functioning of individual life educationally under the conditions of group organization. The librarian has somehow succeeded in establishing what is commonly spoken of as library atmosphere. In the best sense this implies that a consensus has been arrived at throughout the entire school with reference to the rights of individual readers and with reference to the decorum favorable to the maintenance of these rights. The group not only understands the purposes of the individual in coming to the library reading room, but sympathizes and cooperates with him to the end that he may achieve there his purposes most satisfactorily.

If, then, there is library atmosphere, it is to be inferred that the group of readers at the tables is intelligent in its attitude and possesses some knowledge of the technique of library use and of silent reading. There is also an emotional element involved. In consequence, individuals who do not fully *understand* the requirements of the individual reader *feel* yet constrained to be considerate, to observe the rule of "silence" and of orderly behavior within the reading room. The librarian is free to give her attention not to the enforcement of these important rules, but to service. The rules are enforced within the group itself in the form of self-sustaining group conduct. Individuals drop into line, or else are frowned upon by the group. The law seems to be that every one can satisfy his own individual needs if he observes certain simple requirements and if he does not interfere with the rights of other individuals endeavoring to satisfy similar needs.

For all of the apparent concentration upon personal needs on the part of the readers in the library reading room, analysis shows that the situation there is highly social in character, there is a growing appreciation of the advantages in using books and library materials in common. The primitive instincts of hoarding up for selfish consumption give way to forms of organization that make possible wide public patronage. The library becomes social in the additional sense that in it public properties, goods belonging to many individuals, are so stored for distribution as to make a fluid situation, circulation from individual to individual. The larger the properties of the group, the greater the potential service to the individual; the more considerate the individual becomes of the needs of others, the more adequately are his own needs satisfied. Further, the individual forms habits of thinking, of concentration, in social situations. He loses some of those primitive, non-social tendencies to clutch his provender up and back into a corner where he can consume it in isolation without sharing with others in any sense whatsoever. He learns to sit in the midst of a large group of readers, with a book, and read with comfort. He learns to concentrate, even when he looks from the pages of his book into the faces of his chums and comrades and of others around him.

The situation in the school library closely analyzed from the sociological point of view shows many elements of a social character that grow and strengthen under proper conditions of administration. A knowledge of the great working classifications of books, with attendant confidence in the availability and accessibility of library materials so classified, is undoubtedly one element. There is no need to push ahead in line, to shove someone else aside; every one will be served *in good time. The materials are easily accessible; they are available without loss of time.* Other elements are respect for public property, association within groups where like needs are felt, common methods of satisfying needs, and forms of group conduct determined by the purposes of individuals with common or related ends in view.

It would be difficult to find a better example than in the school library of the fostering care of the individual under the conditions of group organization. Here is an example of socialization as opposed to individualization in educational work. Here the individual is adequately cared for without isolating him from the social

groups in which his active interests place him.

Yet, occasionally, a librarian is found who seeks individualization rather than socialization. A few comments to the point will be illuminating and useful in differentiating further between individualization and socialization, between mass instruction and group instruction. This differentiation is of considerable importance because in public education the individualization of instruction and mass instruction tend to become identical, in that each *masses* individuals in non-social or externally controlled groups, for convenience and economy. The librarian who works towards individualization rather than socialization formulates *rules* that will bring individuals severally into a kind of goose-step. Her rules must so operate as to mass or bank all other individuals while any one individual is being served. The lines of constraint are direct from *headquarters* to each individual, and consciousness flows towards headquarters rather than towards *public opinion*. The entire organization is set up on the basis of this kind of individual domination. Even the furniture may be designed for the purpose of massing individuals rather than for that of bringing them into sociological groups. At the present time in school library circles, a few enthusiastic persons are praising some newly designed *individual reading tables*. These tables are ingeniously constructed to give the individual what these persons regard as the advantage of actual physical isolation from other members of the group; and if not this, certainly to break down any possible social relations, to give a feeling that the reader is detached, aloof, removed or unrelated in interests from others around him; this in order that he may concentrate upon the task before him, upon the page in a book.

These *individual* tables are fitted with upward projecting ledges that have, it is claimed, the psychological effect of bringing the reading materials that are being used close up, of giving a sense of "personal ownership in the materials before the reader." The tables are placed at such relative angles that the individual reader may, if he raises his eyes from his book, as he must at times, do so without glancing into the face of someone opposite him. He may read as if he were entirely alone in the room. He becomes one of 70 or 100 or more who have the privilege of occupying temporarily one of these individual stalls. He goes there to do precisely one thing, to assimilate print. He either does or does not do this, but at any rate he is an easy target for someone in authority if he does not. The atmosphere in the room becomes not "library atmosphere," but the high tension and electrified atmosphere of external domination—very conducive to concentration? This situation is typical of individualization and mass instruction as opposed to group instruction.

To a normal person outside the school looking in upon this type of situation, there is an impression of strange unlikeness to familiar situations in public library reading rooms, or in homes, or in clubs. Only in the offices of highly competitive business houses can anything paralleling it be found. And even the office of the highly competitive business house is found to be adapted to very limited uses, supplemented by these same homes and clubs and reading rooms.

Educators are learning that surroundings, physical surroundings, have important effects upon group life. The very appearance of the traditional school room, individual desks, box-like, tier upon tier, disrupts organic group life. This type of furniture is designed for mass formation, not for group formation. It is supposed to provide adequately and economically for each individual. Yet where matters of personal convenience are involved, it is possible to make such provision economically without breaking down group solidarity. Certainly individual tables should not be made a dominating feature of a library reading room. Where some form of individual or personal convenience or of small group convenience is necessary, small conference rooms, or alcoves, may be built opening into the reading room, or constituting a part of it, constructed largely of glass. The situation may be met in a variety of ways. The essential point is that even in matters of physical convenience one individual may be served adequately without imposing upon his associates situations directly in conflict with sound sociological principles, such situations as those that stimulate or nurture *smug individualism*. The point may be stated differently: that over-emphasis upon the individual makes for group disintegration and

selfish individualism, whereas the proper emphasis upon the individual in his group relationships tends to bring about balance between the requirements of individual and social life. The individual isolation of readers in the library by seating all at individual tables is an improper and injudicious emphasis upon the individual.

The school library administered on sound sociological principles is a place of individual and group unity. There are no irreconcilable conflicts between the two. As a matter of fact, in the layout and furnishing of the high-school library reading room, standards have already been fairly well established for the proper care of the individual under the conditions of group organization. Ratios have been worked out between the needs of the individual reader and the actual floor space required for total service to the group. For example, in a high school of an enrollment of 1,000 to 2,000, seating accommodations are needed for from 10 per cent. to 12 per cent. of the enrollment at any given time, with from 16 to 25 square feet of floor space allowed per reader to provide adequately for him in the group. This means that on this basis ratios are being established that make it possible to construct a library reading room architecturally and furnish it so as to keep the proper balance between individual and group requirements. Such matters as passing back and forth at will, individually or severally, sitting quietly in an uncramped position free from crowding or jostling, occupying a place that is reasonably near sources of material, having equal opportunity with others for service from the library staff, an abundance of light without striving for positions occupied by someone else, and many other elements making up a balanced *social situation* may be predicted almost mathematically.

Conditions such as these bring individual selfishness into a strong relief that tends to arouse disapproval in the group. Selfishness under such conditions not only is but is seen generally to be a social abnormality. Anyone who attempts to live a gorilla-like existence in the library will soon be marked for his unsocial habits. Yet the individual reader, even if he can not reign there in blissful solitude, may merge with the group without becoming separated or lost from his personal interests and comforts, and with gains rather than losses in educational opportunities.

C. C. CERTAIN
THE NATIONAL COUNCIL OF TEACHERS OF ENGLISH

QUOTATIONS

SORTING STUDENTS FOR COLLEGE

OUR fortunate youths with their shining morning faces are now creeping like snails from summer camps and juvenile vacationings, returning to the city to begin the work of stuffing for college-entrance tests.

Schools that make it a business are busily cramming the adolescent mind with Latin tags, French irregular verbs, geometric figures and what not. This or that tutor boasts his efficiency, just as a Strasburger vaunts his powers of distending the liver of a goose for market. To add to the general excursions and alarums, there are the psychological tests with the newer rigmaroles of a scientific process for estimating the potentiality of a boy's mind. In short, America is preparing for another season of education.

College authorities empowered to accept or reject candidates for admission to overcrowded class-rooms are facing momentous decisions. All who knock at the gates will have passed the entrance tests, and some with lower grades will boast higher psychological marks. A few points between two candidates can not be used for a rule-of-thumb method of selection. The man who asks for education and who has his certificate of eligibility can not be turned back lightly. The problem becomes impossible of fair solution except by enlarging plants and engaging professors at higher salaries.

Perhaps, after all, the alumni rule of eligibility might as well apply as any other. Let every candidate for admission report in a football suit and let him weigh at least 165 pounds and be able to run the hundred yards in ten and two fifths seconds.—*The N. Y. World.*

SOCIETIES AND MEETINGS

THE INTERNATIONAL HEALTH EDUCATION CONFERENCE

THE International Health Education Conference was held in San Francisco June 28 to July 6, as Group E. of the World Conference on

Education, under the auspices of the National Education Association. The groups cooperating to prepare the program for this conference were the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association, The American School Hygiene Association, The Child Hygiene Department of the National Education Association, The Physical Education Department of the National Education Association and the American Child Health Association.

"Healthy teachers for healthy schools" might almost be taken as the creed of the International Health Education Conference which was held in San Francisco from June 28 to July 6. Health Education is not to be a passing fad, for it is being built upon constructive principles which will stimulate a new attitude toward health for both teacher and child.

With the cooperation of all the forces working toward the common goal of health, The International Health Education Conference sponsored a program looking to the health of the teacher as well as to that of her pupils. Since it was not an isolated movement, but was held as a part of the World Education Conference, while the Conferences of the National Education Association and of the American Medical Association were also in session in the same city, the International Health Education Conference had an added significance as a step in making health a world-wide aim of education.

The breadth of its influence is evident from the fact that it was attended not only by every type of health worker from this country, but also by delegates from thirty-two foreign countries. The program likewise was comprehensive, covering every phase of health education.

The conference considered health education from all points of view—those of the doctor, the dentist, the nurse and the research worker, but above all from that of the class room teacher whose interest and cooperation is always indispensable. The individual problems were presented by such experts as Dr. E. V. McCollum, Alonzo E. Taylor, Dr. Bird T. Baldwin, Dr. Haven Emerson, Prof. C. E. Turner, Dr. Thomas D. Wood, Dr. Wm. Palmer Lucas and Dr. Harold K. Faber.

From the opening meeting when Mr. Courtenay Dinwiddie, general executive of the American Child Health Association, struck the key note of cooperation and William B. Owen, president of the National Education Association, vouched for the good will of the teachers, it was evident that every one was united in a sane and far-seeing vision of the place of health in education. Mr. Dinwiddie, although he spoke expressly for the American Child Health Association, in reality voiced the purpose of the whole conference when he said, "It is the establishment of harmonious relations between this health organization and our educators which we hope to bring about. By introducing into the schoolroom measures compiled by health experts and taught the children by healthy teachers, the well-being, health and happiness of future generations will be greatly assured."

Dr. William Palmer Lucas, in speaking of the need of health education, stated that of our nineteen million children of normal school age, fifteen million are suffering from preventable defects.

From the teacher's point of view one of the most important developments of health education is the growth of a new type of training, a subject which Miss Sally Lucas Jean, director of the Health Education Division of the American Child Health Association, discussed in connection with the fellowships and scholarships which the Child Health Association awarded during the conference. Mr. Dinwiddie and Dr. Lucas had both emphasized the fact that the teacher must learn to regulate her own health as well as to handle methods of teaching health to children. Miss Jean summed up the need for the new type of health teacher by saying:

"We do not want a great army of trained health supervisors, but we do want a great army of trained teachers, teaching health to the children and inspired to do this by the fundamental knowledge of the subject-matter and of the great good to mankind which will result."

On the afternoon of the opening day several health programs now in operation were discussed . . . those of the Merrill-Palmer School of Detroit, the John Swett School of San Francisco, and the state health program of Virginia. These papers will appear in the full report of the conference, which will be published by the American Child Health Association, this autumn, and should be of special interest to health workers. At later meetings, the relation

to the school health program of the nutrition specialist, of the school doctor, of the dentist, of the public health nurse and of the physical education director were discussed.

One session was devoted to the training of teachers and leaders for health education. The points most emphasized were the need for a high standard of scientific training in physiology, hygiene and nutrition. One of the speakers made a significant comment on much of the present day normal school training, where, "under the present system of text-book teaching, the repeated inoculations of text-book doses develop so high a degree of resistance to germs of knowledge that they are promptly eliminated from the system as soon as examinations are over."

At round-table meetings there were informal discussions of methods and devices of health teaching. This sort of symposium formed the clearing house for a mutual exchange of helpful suggestions. At different times during the meetings, delegates from foreign countries were asked to review their work. Those from Mexico, China and Japan were especially interesting but perhaps no single piece of health work for children is more outstanding than that done in Belgium since the war. It was reported to the conference by Mlle. Kaiser, directrice of the Colony for Debilitated Children at Brussels. It was an inspiration to others who find their community's health problems, in comparison, so much less difficult.

Toward the close of the conference, more general aspects of the problem of health education were considered . . . its importance, its place in the school program, the underlying educational principles, and its objective, "to give health its place in the complete life of the child."

At the plenary meeting of the World Conference on Education all of the resolutions recommended by the International Health Education Conference were unanimously adopted, a fact which is especially gratifying to those who have struggled for cooperation. Eight resolutions in all on health education were passed. Two dealt with the work of physicians and dentists and of public health nurses. Another provided for an International Health Education Division of the World Education Conference, which should make available the reports of the conference and other material in the language of any nation requesting such material, and should encourage health work by offering scholarships in countries which desire to improve their facilities.

Other resolutions considered further development of physical education, and of nutrition in connection with the school health program, while a third recommended the establishment in all institutions of teacher-training, of specific courses of health teaching for the general teacher, as well as for the special health teacher and supervisor.

And finally through a resolution on the "status and aims of health education" the World Conference recognized the fundamental principles of the International Health Education Conference—cooperation of all school and voluntary agencies, especially parents; the training and examination of pre-school children; and the use of growth records as simple but effective indices of health.

EDUCATIONAL RESEARCH AND STATISTICS

LENGTH OF LINE AS RELATED TO READABILITY IN THE FIRST FOUR GRADES

Reading material was prepared so as to form six specimens of lengths 55 mm., 80 mm., 90 mm., 102 mm., 120 mm. and 142 mm., to be read by the third and fourth grades and six specimens of lengths 55 mm., 80 mm., 91 mm., 103 mm., 123 mm. and 142 mm., to be read by the first and second grades. The children were divided into as many groups of approximately equal reading ability as there were specimens to be tested for the grade and the specimens were read in such order by the various groups as would eliminate the advantages which would accrue from learning. For a full discussion of the methods of control uses see School and Society, Volume XVI, 697–700.

(Due to the failure of the press to print the material according to specifications it will be observed that the line lengths in the third and fourth grades are not identical with those of corresponding specimens in the first and second grades. This is mentioned to prevent the idea that there might be a purpose in so preparing them.)

THIRD AND FOURTH GRADES
LENGTH OF LINE
96 CHILDREN—576 READINGS

Time in Seconds consumed in Reading

Length of Lines	Specimen 1 55 mm.	Specimen 2 80 mm.	Specimen 3 90 mm.	Specimen 4 102 mm.	Specimen 5 120 mm.	Specimen 6 142 mm.
Arithmetic Mean of Reading Time in Seconds	65.71	65.29	63.74	63.63	64.26	65.33
Standard Deviation From Arith. Mean of Reading Time	1.83	2.02	1.79	1.77	1.77	1.79
Number of Errors made in Reading						
Arithmetic Mean of Errors	2.99	3.07	2.94	2.86	3.24	2.91
Standard Deviation From Arith. Mean of Errors	2.72	2.77	2.77	2.66	2.69	2.88

SECOND GRADE
LENGTH OF LINE
48 CHILDREN—288 READINGS

Time in Seconds consumed in Reading

Length of Lines	Specimen 1 55 mm.	Specimen 2 80 mm.	Specimen 3 91 mm.	Specimen 4 103 mm.	Specimen 5 123 mm.	Specimen 6 142 mm.
Arithmetic Mean of Reading Time in Seconds	79.73	77.44	76.60	75.10	78.13	78.81
Standard Deviation From Arith. Mean of Reading Time	1.42	1.22	1.40	1.29	1.56	1.51
Number of Errors made in Reading						
Arithmetic Mean of Errors	3.00	2.54	2.58	2.46	2.56	2.73
Standard Deviation From Arith. Mean of Errors	2.17	1.84	2.05	1.89	1.55	2.04

FIRST GRADE
LENGTH OF LINE
72 CHILDREN—432 READINGS

Time in Seconds consumed in Reading

Length of Lines	Specimen 1 55 mm.	Specimen 2 80 mm.	Specimen 3 91 mm.	Specimen 4 103 mm.	Specimen 5 123 mm.	Specimen 6 142 mm.
Arith. Mean of Reading Time in Seconds	113.76	111.14	108.50	108.22	114.75	112.02
Standard Deviation From Arith. Mean of Reading Time	2.74	2.58	2.56	2.81	2.89	2.88
Number of Errors made in Reading						
Arith. Mean of Errors	3.01	3.25	3.00	2.82	3.35	3.25
Standard Deviation From Arith. Mean of Errors	2.41	2.50	2.43	2.39	2.18	2.61

Reviewing the tables on length of line in their entirety we find that they corroborate each other in placing the most desirable length of line at from 90 to 103 millimeters with evidence that the latter is more near the desirable length.

The question at once arises as to what length of line the children have been accustomed to reading. In order to determine the answer the writer measured the line lengths of the books used in the first four grades of the school in which the study was made. An examination of the first-grade books showed that there was no uniformity of line length but that many lengths of line were to be found in any of the books. Of the seven books found in the second grade, one contained lines 93 mm. in length, one 101 mm., and five 102 mm. Six books were represented in the third grade as follows: one 61 mm., one 81 mm., one 96 mm., two 102 mm., and one 103 mm. The following lengths of line were represented in the fourth grade: one 94 mm., one 98 mm., one 102 mm., one 106 mm., and one 115 mm. While 102 millimeters were used more often than any other length in the third and second grades, there is very little to support the possible contention that previous reading habits were instrumental in determining the findings, for 102 millimeters seems preferable in the first grade with no possible opportunity in this instance to fix reading habits with respect to such a length of line.

The results of this study do not agree with the general consensus of expert opinion which has a tendency to favor 90 millimeters as a maximum. The best length of line as indicated by this study is above 90 millimeters rather than below it in all the grades investigated.

Dearborn found that the eye makes its longest pause near the beginning of the line and a pause of more than average duration near the end of the line. This is significant, for the shorter the length of line, the size of type remaining constant, the greater the number of initial and final fixations. On the other hand, as the lines become longer and longer, one would expect the difficulty of making the initial fixation to become greater, the size of the type remaining constant. Further, lines beyond a certain length cause the reader to shift the head in order to prevent an undue amount of asymetrical accommodation. It is likely that the most desirable length of line is largely determined by the proper balance of the above factors.

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